

Food and Fiber System Share of GDP Remains Robust

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The food and fiber system's (FFS) share of total Gross Domestic Product (GDP) reached 16.4 percent in 1999, continuing the upward trend seen through most of the 1990s. In 1991, the share was only 14.7 percent. This increase reflects a move by both domestic and foreign consumers away from low-value bulk commodities towards a market basket filled with more high-value processed products. The share of total employment generated by the FFS has trended downward from 18.8 percent in 1991 to 17.4 percent in 1999 (table 1). High labor productivity in the farm sector coupled with a stable set of real final demands for agricultural and food products compared with an expansive nonfarm economy produces a diminishing relative share of total employment.

The food and fiber system as a whole added \$1.5 trillion to the Nation's GDP in 1999 (table 2). Of this, \$984 billion came from manufacturing and distribution, while \$468 billion came from inputs. The farm sector by itself accounted for \$69.8 billion.

The industries within the FFS generate benefits to the total economy in different ways. There were wide differences between some industries' contributions to GDP and share of employment. In some manufacturing industries—inputs, food processing, and tobacco, for example—the share contributed to GDP was more than twice the share of employment. By contrast, the relatively low-wage, labor-intensive food service sector job share was nearly twice its value-added share.

The food and fiber system comprises the producers of goods and services required to assemble, process, and distribute raw farm products to U.S. and foreign consumers. Food and fiber system employment estimates are developed using a national input-output model that describes input use and factor payments for each sector of the economy. The model is used to

estimate the amount of employment in each sector needed to support the final demands for agricultural products. Thus, this measure may include jobs in all sectors of the economy, even those where the link to agriculture is weak. Unlike the farm-related employment measure used in the previous article, food and fiber sector estimates do not count all jobs in a particular sector; only the jobs needed to support demand for agricultural products are counted. Food and fiber sector estimates have a close relationship to the U.S. Department of Commerce's National Income and Product Accounts. ^{RA}

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Table 1

Key statistical indicators of the food and fiber sector

	1991	1992	1993	1994	1995	1996	1997	1998	1999
U.S. civilian employment (mil.) ¹	126.3	128.1	129.2	131.1	132.3	133.9	136.3	137.7	139.4
Food and fiber (mil.)	23.7	23.1	23.6	24.2	24.5	24.2	24.1	24.0	24.3
Percent of employment	18.8	18.0	18.3	18.5	18.5	18.1	17.7	17.4	17.4
Farm sector (mil.)	2.0	1.9	1.8	1.9	2.0	2.0	1.9	1.8	1.7
U.S. gross domestic product (\$ bil.)	5,986.2	6,318.9	6,642.3	7,054.3	7,400.5	7,813.2	8,318.4	8,790.2	9,299.2
Food and fiber—value added (\$ bil.)	877.5	924.8	965.7	1,066.2	1,126.5	1,210.4	1,317.1	1,446.4	1,521.4
Percent of gross domestic product	14.6	14.6	14.5	15.1	15.2	15.4	15.8	16.4	16.3
Farm sector—value added (\$ bil.) ²	71.1	75.5	73.1	78.3	75.3	86.7	83.5	74.8	69.8

¹U.S. Department of Labor, Bureau of Labor Statistics.²Value-added data presented here are consistent with U.S. Department of Commerce, National Income and Product Accounts, accounting conventions.

Table 2

Contribution of the food and fiber system to the U.S. economy, 1999

Industry	Value added to GDP	Share of FFS contribution to GDP	Share of GDP	Number of workers	Share of FFS employment	Share of total U.S. employment
	<i>Billion dollars</i>	<i>Percent</i>		<i>Thousands</i>	<i>Percent</i>	
Farm sector	69.8	4.6	0.8	1,714	7.1	1.2
Total inputs	468.4	30.8	5.0	4,720	19.5	3.4
Mining	15.6	1.0	0.2	62	0.3	—
Forestry, fishing and agricultural services	13.2	.9	0.1	409	1.7	0.3
Manufacturing	160.0	10.5	1.7	1,192	4.9	0.9
Services	279.6	18.3	3.0	3,058	12.6	2.2
Total manufacturing and distribution	984.0	64.7	10.6	17,835	73.4	12.8
Manufacturing:						
Food processing	177.7	11.7	1.9	1,296	5.3	0.9
Textiles	45.3	3.0	0.5	993	4.1	0.7
Leather	0.3	—	—	4	—	—
Tobacco	34.5	2.3	0.4	29	0.1	—
Distribution:						
Transportation	49.6	3.3	0.5	596	2.5	0.4
Wholesaling and retailing	460.3	30.2	4.9	8,306	34.2	6.1
Food service	215.5	14.2	2.3	6,606	27.2	4.7
Total food and fiber system	1,521.5	100.0	16.3	24,265	100.0	17.4

— = less than .05 percent.

Source: Calculated by ERS using data from the U.S. Department of Commerce.